

PLATE VI.

ILLUSTRATIONS OF VARIOUS SPECIES OF COCCIDÆ, BELONGING TO
THE GENUS MONOPHLEBUS.

THE family of the well-known scale insects, Coccidæ, presents to us some of the most singular of annulose animals. Without speaking of their singular habits, we find some of them on arriving at their last state, so far departing from the typical characters of the winged insects, as to prove that Ptilota may exist, which in the imago state are not only wingless, but also footless, and antennæless, and in which even all appearance of annulose structure is lost, the creature in fact becoming an inert mass of animal matter; a slender seta arising from the breast, and thrust into the stem or leaf on which the animal is fixed, being the only external appendage to the body. Such is the case with the imago state of the females of many of the species—the males on the other hand are small, active-winged creatures provided with legs, long antennæ, and anal filaments; but, as if to keep up the anomalous character of the group, even these males possess but a pair of wings, the wanting pair being represented by two small appendages, somewhat like the halteres of the Diptera.

Some of the females are, indeed, more active than those mentioned above; they, however, undergo no change from their larva state, but continue to creep about with short legs and rudimental antennæ, and are always destitute of wings. Such is the case with the females of *Pseudo-coccus*, *Westw.* (*Coccus* *, *Burm.*) *Cacti*, *Adonidum*, &c., and with those of the genus *Monophlebus* of Leach. In the females of the former genus, the body is covered with a white powder, and the sides furnished with appendages. These are well known to horticulturists under the name of the *Mealy bug*; whereas in *Monophlebus*, the females have the body naked, without either lateral appendages or anal filaments. Such at least is the case with the European species, *M. fuscipennis*, *Burm.*, an insect I had the pleasure to capture, in company with its talented describer, Burmeister, on the trunks of fir-trees, in the Thiergarten, near the Brandenburg Thor of Berlin. The males have very long multiarticulate verticillated antennæ, which, with

* I regard the *Coccus* of the ancients, the female of which is fixed and gall-like, as the true type of *Coccus*.

the possession of only a pair of wings, led Fabricius to place one of the species in company with the Dipterous Cecidomyiæ.

SPECIES I.—*Monophlebus Fabricii*, W.

M. thorace atro nitido, margine sanguineo, abdomine nigro, apice plano bifido rufo, lobis setis tribus porrectis elongatis; alis atris, lineis duabus albo-hyalinis; pedibus nigris. ♂.

Syn.—*Chironomus dubius*, Fabr. Syst. Antl. p. 46.

Habitat in Sumatra.

Obs.—The insect, described by Fabricius as the male of this species, being nearly half as small and with the setæ of the abdomen short, was evidently the male of a distinct species.

SPECIES II.—*Monophlebus atripennis*, Klug. Burm. (Handb. 2. 80. exclus. syn. Chir. dubius, Fab.) M. fusco-ater, abdomine scutello alarumque basi obscure-coccineis, subpruinosis, antennis corpore longioribus hirsutissimis; alis piccis, lineis duabus albo-hyalinis; abdomine plano hirto, truncosius profundis inter segmenta, appendicisque duobus carnosus hirtis ($\frac{1}{2}$ lin. long.) apicalibus. Long. corp. $3\frac{1}{2}$ lin.

Habitat in Java.

SPECIES III.—*Monophlebus Leachii*, Westw. (Zool. Jl. No. 20, p. 452.) Plate 6, fig. 1. M. piceo-niger, abdomine prothoracque fusco-carneis, scutello albedo; alis piccis, lineis duabus albo-hyalinis; antennis longissimis 25-articulatis; abdomine plano, apice inciso, segmentis 5 ultimis ramum longum (longitudine crescentes) pilosum utrinque emittentibus. Long. corp. lin. $3\frac{1}{4}$. Long. rami ultimi lin. 1; long. antenu. lin. 4; expans. alar. lin. 8.

Habitat in Malabar—In Mus. nostr.

SPECIES IV.—*Monophlebus Burmeisteri*, Westw. (Plate 6, fig. 2.) M. picco-niger, prothorace abdomineque fusco-carneis, scutello fasciæ inter alas albidis; alis latioribus piccis, basi parum pallidioribus lineisque duabus albo-hyalinis; antennis corpore longioribus; abdomine utrinque ramos 5 longiores et pilosos emittente.

E præcedenti difert alis brevioribus latioribus, margine postico magis rotundato; et filamentis abdominalibus longioribus.

Habitat —? In Mus. nostr. Long. corp. lin. $2\frac{1}{4}$. Expans. alar. lin. $6\frac{1}{2}$.

SPECIES V.—*Monophlebus Saundersii*, Westw., M. Burmeisteri affinis at multo minor, albo-farinosus ramisque abdominalibus brevioribus, caput antennæ pedes et dorsum thoracis brunneo-fusca, thoracis lateribus abdomineque testaceo-carneis, hoc ad latera ramis brevioribus hirtis instructo duobusque apicalibus longioribus. Alæ fuscæ margine postico dilatato, lineis duabus albo-hyalinis. Penis ex ano prodiens, crassus cylindricus curvatus, ramis posticis longior, apice crassior truncatus. Long. corp. lin. $1\frac{1}{2}$. Expans. alar. lin. 4.

Habitat in partibus septentrion. Indiæ orientalis, D. Campbell. In Mus. D. W. W. Saunders.

SPECIES VI.—*Monophlebus Raddoni*, Westw., (Plate 6, fig. 3.) M. fulvo-carneus, antennis pedibusque concoloribus, his articulis circiter 20; thoracis dorso piceo; alis apice subacutis, margine postico magis rotundato, fuscis lineis duabus albo-hyalinis (antica fere ad apicem alarum ducta), costa fulvo-carnea, vena postcostali sanguinea; abdominis lateribus lobis parvis hirtis instructis, segmento ultimo appendiculis duabus majoribus ovalibus. Long. corp. lin. $2\frac{3}{4}$. Expans. alar. lin. $7\frac{1}{2}$.

Habitat apud "the Gold coast" Africae occidentalis. In Mus. nostr. communic. D. Raddon.

SPECIES VII.—*Monophlebus Illigeri*, Westw. (Plate 6, fig. 4.) M. nigricans, capite marginibus thoracis abdomineque sanguineo-fuscis; antennis (corpore paullo longioribus 22-articulatis) pedibusque nigris; alis elongatis angustioribus, apice rotundatis, fuscis; costa obscuriori; vena postcostali sanguinea, vena mediana abbreviata, lineisque duabus tenuibus albo-hyalinis; abdomine impressionibus profundis inter segmenta, lateribusque lobis parvis ovatis hirtis instructis. Long. corp. lin. $1\frac{1}{4}$. Expans. alar. lin. 5.

♀? depressa coccinea albo-farinoso, pedibus 6 crassis, antennisque duabus longitudine tibiarum concoloribus. Long. corp. lin. $2\frac{1}{4}$.

Habitat in Terra Van Diemenii. D. Ewing, ♂ ♀. In Mus. nostr.

SPECIES VIII.—*Monophlebus fuscipennis*, Burm. (Handb. d. Ent. 2, p. 80, pl. 2, fig. 46.) M. ex coccineo aurantiacus, ♂ antennis articulis 25. Capite thorace pedibusque fuscis; alis lineis duabus hyalinis; ♀ undique subpubescens, antennarum articulis 11 pedibusque fuscis. Expans. alar. ♂, lin. 4.

Habitat in Germania supra quercuum, pinorum, &c. In Mus. nostr. ♂. ♀. Dedit. D. D. Burmeister.

The plant represented in the plate is the Indian *Periploca esculenta*.